SB 10/30/02
#22
3 copies

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of :
:
Matthew W. KAY et al. :
: Group Art Unit: 2167
Appln. No.: 09/384,182 :
: Examiner: A. Fischer
Filed: August 27, 1999 :
:
For: ELECTRONIC COMMERCE SYSTEM ARCHITECTURE



**APPEAL BRIEF**

Honorable Commissioner of
Patents and Trademarks
Washington, D. C. 20231

Sir:

This Appeal Brief and Petition for One (1) Month Extension of Time is submitted in support of the Notice of Appeal filed June 4, 2002.

## I. REAL PARTY IN INTEREST

Adelphia Communications Corporation, CitiCorp, and Insight Communications Company, Inc. have been assigned all rights in this application, as recorded at Reel 012935, Frame 0855. Accordingly, Adelphia Communications Corporation, CitiCorp, and Insight Communications Company, Inc. are the real parties in interest.

## II. RELATED APPEALS AND INTERFERENCES

NONE

## III. STATUS OF CLAIMS

Claims 29-60 are pending. Claims 48-60 have been restricted and withdrawn by the Examiner, and accordingly claims 29-47 remain pending in this application. Each of

claims 29-46 is under appeal. Pending claim 47 is not subject to withdrawal or rejection, and is not otherwise addressed in the final Official Action. Accordingly, it is presumed that claim 47 has been deemed allowable.

## IV. STATUS OF AMENDMENTS

Amendments have been filed on August 23, 2000 (Preliminary Amendment canceling claims 1-28 and adding claims 29-60), and September 4, 2001 (modifying claim 37). The amendments have been entered.

## V. SUMMARY OF INVENTION

In a preferred embodiment of the invention of claim 29, as shown in Figure 1 and described on pages 3-8, an electronic commerce system architecture for use in networks having a plurality of network devices, each representing a respective network user, includes a first plurality of first servers (e.g. the two commerce application servers (CAS's) 16 at the top of Figure 1). As also describe on pages 7-8 with reference to Figure 2, each of these CAS's is configured to communicate with a first plurality of network devices (e.g. set top boxes (STB's) 16 at the top of Figure 1) associated with a first network (e.g. a digital communications network (DCN), which is part of a broadband delivery system (DBDS), 26 at the top of Figure 1), to receive a first product related request from one of the first plurality of network devices (e.g. one of the STB's), to further transmit the received first product related request, to receive first product related data in response to the further transmitted first product related request, and to transmit the received first product related data to that one network device (e.g. the one STB) in response to the received first product related request.

A second server (e.g. the head end database server (HEDS) 14 at the top of Figure 1) has a first database storing the first product related data and second product related data. As also described on pages 8-9 with reference to Figure 3, the HEDS 14 is configured to receive the further transmitted first product related request, to transmit the stored first product related data to the one of the first plurality of first servers (e.g. the one CAS) from which that request is received, and to still further transmit the received first product related request.

As also described on pages 9-10 with reference to Figure 4, a central server (e.g. the Commerce Control Point Server (CCPS) 20 that forms part of the commerce control point (CCP) 24) has a second database storing the first and the second product related data. As described, the CCPS 20 is configured to transmit the first and second product related data stored in the second database, (e.g. the CCPS 20 database) and to receive the still further transmitted first product related request and store the received request in the second database (e.g. the CCPS 20 database). The first and the second product related data stored in the first database (e.g. the HEDS 14 database) are the first and second product related data transmitted by the central server (e.g. the CCPS 20).

As recited in claim 30, and described in the above referenced disclosure, each of the first plurality of first servers (e.g. each of the CAS's 16 at the top of Figure 1) is further configured to transmit applications operable (e.g. by the STB's 18) to receive the product related data.

As recited in claim 31, and described in the above referenced disclosure (see also Figures 5a-d and 6a-f and related text), the first product related request could be either a request to purchase a product or a request for information regarding the product itself.

As recited in claim 32, the first product related request is receivable from, and the first product related data is transmittable to, the one network device (e.g. the one STB) only if the one network device (e.g. the one STB) is tuned to one of multiple broadcast channels (e.g. one of the channels available on the DBDS 26).

As required in claim 33, and described in the text on page 13 referencing Figure 6a, the first product related data transmitted to the one network device (e.g. the one STB) is viewable (e.g. via window 502) in conjunction with video programming broadcast over the one channel (e.g. via window 504).

As required in claim 34, the first plurality of network devices is a plurality of set top boxes (e.g. STB's 18). Claim 35 requires that the first network be a video broadcast network (e.g. DBDS 26). According to claim 36, the first product related data is different than the second product related data.

Claim 37 requires a second plurality of the first servers (e.g. the two CAS's 16 at

the bottom of Figure 1). Each of these CAS's is configured to communicate with a second plurality of network devices (e.g. the STB's 18 at the bottom of Figure 1) associated with a second network (e.g. the two DCN's, which are part of the DBDS's, 26 at the bottom of Figure 1), to receive a second product related request from one of the second plurality of network devices (e.g. one of the later STB's 18), to further transmit the received second product related request, to receive the second product related data in response to the further transmitted second product related request, and to transmit the received second product related data to that one network device (e.g. the one later STB 18) in response to the received second product related request.

Also required is a third server (e.g. the HEDS 14 at the bottom of Figure 1), having a third database storing the first and the second product related data. The latter HEDS 14 is configured to receive the further transmitted second product related request, to transmit the stored second product related data to the one of the plurality of second servers (e.g. one of the later CAS's 16) from which that request is received, and to still further transmit the received second product related request.

Additionally, the central server (e.g. the CCPS 20) is further configured to receive the still further transmitted second product related request and store that received request in the second database (e.g. the CCAS 20 database), and the first and the second product related data stored in the third database (e.g. the later HEDS 14 database) are the first and second product related data transmitted by the central server (e.g. the CCPS 20).

According to claim 38 (see description of Figure 2), the one first server (e.g. one of the CAS's at the top of Figure 1) includes a high priority queue and a low priority queue and is further configured to queue the received first product related request in one of the high and the low priority queues. The second server (e.g. the HEDS at the top of Figure 1) is further configured to receive the further transmitted first product related request within a first time period after receipt of that request, if queued in the high priority queue and, to receive the further transmitted first product related request within a second time period after receipt of that request, if queued in the low priority queue, wherein the second time period being longer than the first time period. As recited in claim 39, the high priority queue is a real time queue, and the low priority

queue is a batch queue. As required by claim 40, the first product related request includes information indicative of response priority, and the one first server (e.g. the one of the CAS's at the top of Figure 1) is further configured to queue the first product related request received from the one network device (e.g. the one STB) in the one queue based on the indicated response priority.

According to claim 41, the first product related data stored in the first and the second databases corresponds to a preference of a user associated with the one network device. Claim 42 requires that the second database (e.g. the CCPS 20 database) be further configured to store video programming schedule data, and that the central server (e.g. the CCPS 20) be further configured to transmit the video programming schedule data stored in the second database. Additionally, the second server (e.g. the HEDS 14 at the top of Figure 1) must be further configured to store the transmitted video programming schedule data in the first database (e.g. the HEDS 14 database), to generate trigger data based on the video programming schedule data stored in the first database, and to transmit other data indicative of the availability of the first product related data and the trigger data to the one first server (e.g. the one CAS at the top of Figure 1). The one first server (e.g. the one CAS) is further configured to receive the transmitted other data and trigger data, to transmit the other data and the trigger data to the one network station (e.g. the one STB at the top of Figure 1), responsive to which an icon is displayed at the one network station (see Figure 5a icon 402) simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device (e.g. the one STB) responsive to the display of the icon.

As required in claim 43, the second database (e.g. the CCPS 20 database) is further configured to store video programming schedule data, and the central server (e.g. the CCPS 20) is further configured to transmit the video programming schedule data stored in the second database. The second server (e.g. the HEDS 14 at the top of Figure 1) is further configured to store the transmitted video programming schedule data in the first database (e.g. the HEDS 14 database), and to transmit other data indicative of the availability of the first product related data and the stored video programming schedule data to the one first server (e.g. the one CAS at the top of

Figure 1). The one first server (e.g. the one CAS) is further configured to receive the transmitted other data and schedule data, to transmit the other data and the schedule data to the one network station (e.g. the one STB at the top of Figure 1), responsive to which an icon is displayed at the one network station (e.g. the one STB) simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device (e.g. the one STB) responsive to the display of the icon.

According to claim 44, the one first server (e.g. the one CAS at the top of Figure 1) is further configured to receive user related data corresponding to a user of the one network devices (e.g. the one STB at the top of Figure 1), and to further transmit the received user related data to the second server (e.g. the HEDS 14 at the top of Figure 1). The second server (e.g. the HEDS 14) is further configured to store the further transmitted user related data in the first database (e.g. the HEDS 14 database), and to transmit the stored user related data with the first product related request to the central server (e.g. the CCPS 20). The central server (e.g. the CCPS 20) is further configured to store the user related data transmitted by the second server (e.g. the HEDS 14) in the second database (e.g. the CCPS 20 database) in association with the stored first product related request.

As recited in claim 45, the user related information received by the one first server (e.g. the one CAS at the top of Figure 1) includes a unique identifier of the one network resource server.

According to claim 46, the user related information received by the one first server (e.g. the one CAS at the top of Figure 1) is received from at least one of the corresponding user and a broadcaster of video programming over the first network.

As required in claim 47, the central server (e.g. the CCPS 20) is further configured to aggregate the user related data transmitted by the second server (e.g. the HEDS 14 at the top of Figure 1), to generate a user profile based on the aggregated user related data, and to select the first product related information based on the generated user profile.

## VI. ISSUES

Whether claims 29-36 and 41-46 are anticipated under 35 U.S.C. §102(b) by PowerTV Inc., White Paper entitled "Applications and Service Infrastructure" (hereinafter "PowerTV"); whether claim 37, which depends from claim 29, is anticipated under 37 U.S.C. §102(b), or obvious under 37 U.S.C. §103(a) over PowerTV; and whether claims 38-40, which depend from claim 29, are obvious under 35 U.S.C. §103(a) over PowerTV in view of Condon (U.S. Patent 5,956,714).

## VII. BRIEF DESCRIPTION OF THE REFERENCES

POWERTV

PowerTV discloses an architecture for delivering the Internet to a television. As disclosed, a plurality of servers are configured to communicate with a plurality of network devices associated with a network. On page 18 of the reference, a figure depicts a set-top box in communication with a broadcast carousel server, an email server, and an HTTP proxy server. These three servers are described on page 18 as follows.

The broadcast carousel server 'webcasts' Web content to the set-top box. The email server "provides standard email functionality." The HTTP proxy server operates in multiple modes. It "acts as a normal 'Intranet' Web Server providing a repository for primarily local content," "acts as a buffer between external Internet Web sites and the set-top" by proving "parental control, enabling ratings control on accessed content in addition to access control lists," and it provides remote browser capability.

The PowerTV servers are configured to provide Internet access to a user via a television/set-top box combination. The particular content/type of information which the user accesses via the Internet is not a subject of the PowerTV reference. On page 3, the business needs of a cable television operator are generally discussed.

CONDON

Condon is directed to a queuing technique. More particularly, Condon discloses a single queue that includes prioritized items, one item in the queue having a higher priority than another item in the same queue (see, generally, column 4, lines 40-53).

## VIII. THE REJECTION

In the Final Official Action dated December 4, 2001, claims 29-36 and 41-46 stand rejected as anticipated under 35 U.S.C. §102(b) by PowerTV Inc., White Paper entitled "Applications and Service Infrastructure" (hereinafter "PowerTV"). Claim 37, which depends from claim 29, stands rejected as anticipated under 37 U.S.C. §102(b), or obvious under 37 U.S.C. §103(a) over PowerTV. Claims 38-40, which depend from claim 29, stand rejected as obvious under 35 U.S.C. §103(a) over PowerTV in view of Condon (U.S. Patent 5,956,714). Claims 48-60 are withdrawn under 35 U.S.C. §121.

Pending claim 47 is not withdrawn, rejected or otherwise addressed in the Final Official Action.

In the Final Official Action, the Examiner repeats, in part, the basis for rejection set forth in the prior Official Action dated March 1, 2001. However, the Examiner no longer asserts that "[f]unctional recitation(s) using the word "to" (e.g. "to receive first product related data" as recited in claim 29) have been given little patentable weight because they fail to add any structural limitations and are thereby regarded as intended use language. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In re Casey, 152 U.S.P.Q. 235 (CCPA 1967); In re Otto, 136 U.S.P.Q. 458, 459 (CCPA 1963). The Examiner recommends removing "to" where the intended use is not desired. Instead the Examiner now asserts "the Examiner notes PowerTV directly discloses connecting the PowerTV to the Internet. Therefore, systems, machines, or other devices connected to the internet and that are old and well known in the art are in essence incorporated into the embodiment of the prior art system."

In response to the arguments submitted in traversal of the prior art rejections set

forth in the Official Action dated March 1, 2001, the Examiner, *inter alia* asserts "First, the Examiner agrees with Applicants that "all words in a claim must be considered in judging the patentability of a claim against the prior art, including functional language." The Examiner further asserts "[i]t is the Examiner's position that functional language may be found in a claim preamble or in the body of a claim and it makes no difference as to where the functional language is found. The Examiner further states that "[i]t is the Examiner's position that the claimed prior art computer is capable of performing the claimed functions (i.e. the computer is capable of or adapted to receive a first product related request through its modem or other connection). Applicants arguments are therefore not persuasive", and cites a number of cases presumably in support of this position.

The Examiner further asserts that "[w]hile Applicants may disagree with how the functional language may be interpreted, an argument that "the Examiner has not fulfilled his duties in examining the claims of the present application by not considering functional language" is clearly incorrect." The Examiner goes on to state that "[w]hether its "for" or "to", the words generally denote how the antecedent is used or what it is used for", which, as can be best understood, the Examiner contends denotes an intended use rather than a recital of function.

On page 10 and the upper half of page 11, the Examiner addresses traversal arguments set forth in the Remarks submitted with the Amendment filed on September 4, 2001, in response to the Official Action of March 1, 2001. However, notwithstanding explicit request for clarification of the Examiner's position that particular features recited in the rejected claims are either taught or suggested by the applied art, the Examiner fails to provide any further explanation as to the basis for maintaining the rejection. Furthermore, although it was noted in the prior traversal that the Examiner had failed to provide any rationale for the rejection of dependent claims 42-46 (as noted above claim 47 is not even mentioned in a rejection), the Examiner does not provide any rationale for the rejection of these claims in the Final Official Action.

## IX. GROUPING OF CLAIMS

Appealed claims 29 is in independent form, and claims 30-47 depend from claim 29. However, the claims do not stand or fall together. At least, each of claims 29, 30, 31, 32, 33, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, and 46 (as well as claim 47, which is presumed to be deemed allowable) recite features which form an independent basis for allowance. Hence, each of these claims stand and fall alone.

## X. ARGUMENT

Appellants respectfully traverse the rejections based on the prior art applied against the claims now pending and under appeal. As discussed below in detail, it is respectfully submitted that the Examiner has not met the burden of proof in establishing that the appealed claims are anticipated or obvious. It is further respectfully submitted that the rejection relies upon art that has been combined without any motivation to do so. It is additionally respectfully submitted that the final rejection lacks the requisite supporting factual basis and/or reasonable rationale, and accordingly cannot be understood. Further still, it is respectfully submitted that the art applied in rejecting the claims neither teaches nor suggests the claimed invention. It is also respectfully submitted that recited limitations have been ignored and that the relied upon art has been construed in a manner inconsistent with its own teaching and that the rejection is at best based on an improper hindsight reconstruction of the claimed invention.

### 1. THE EXAMINER HAS FAILED TO ESTABLISH A PRIMA FACIE CASE

The initial burden of establishing a basis for denying patentability to a claimed invention rests upon the examiner. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); In re Piasecki, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984).

The limitations required by the claims cannot be ignored. See In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). All claim limitation, including those which are functional, must be considered. See In re Oelrich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Hence, all words in a claim must be considered in deciding the patentability of that

claim against the prior art. Each word in a claim must be given its proper meaning, as construed by a person skilled in the art. Where required to determine the scope of a recited term, the disclosure may be used. See In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971).

The Examiner must provide sufficient factual basis or rationale as to how features of the invention recited in the claims are taught or suggested in the applied art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). That is, objective evidence must be presented by the Examiner in support of the rejection. Without such support, the rejection is improper per se.

Claims 29-36 and 41-46 stand rejected as anticipated under 35 U.S.C. §102(b) by PowerTV Inc., White Paper entitled "Applications and Service Infrastructure" (hereinafter "PowerTV"). Claim 37, which depends from claim 29, stands rejected as anticipated under 37 U.S.C. §102(b), or obvious under 37 U.S.C. §103(a) over PowerTV. Claims 38-40, which depend from claim 29, stand rejected as obvious under 35 U.S.C. §103(a) over PowerTV in view of Condon (U.S. Patent 5,956,714).

It is respectfully submitted that the Examiner has failed to establish a prima facie case for the rejection. More particularly, the Examiner has failed to provide objective support or reasonable rationale for the rejections, has ignored limitations recited in the claims, and has applied art in a manner inconsistent with its teachings. Furthermore, as will be discussed further below, in the Final Official Action, the Examiner repeats much of the previously asserted basis for the rejection of claims 29-46 over the prior art, as set forth in the non-final Official Action dated March 1, 2001, without providing a reasonable response to detailed traversal arguments (submitted in the remarks filed with the Amendment of September 4, 2001) highlighting those features and limitations which distinguish over the applied prior art (including arguments which specifically identify positions taken by the Examiner which cannot be reasonably understood and explicit requests for clarification of the Examiner's position). Instead, the response which is offered fails to point to any disclosure whatsoever within the applied art, let alone specific text or figures which might clarify the basis for the rejection. Indeed, the response fails to even provide support for the rejection of those claims for which no support whatsoever had been documented in the prior Official Actions.

For example, claims 42-46 are asserted to be anticipated by the PowerTV reference, but no support for this conclusion has been provided by the Examiner.

Claim 42 explicitly recites that the second database is further configured to store video programming schedule data, and the central server is further configured to transmit the video programming schedule data stored in the second database. Additionally recited is that the second server is further configured to store the transmitted video programming schedule data in the first database, to generate trigger data based on the video programming schedule data stored in the first database, and to transmit other data indicative of the availability of the first product related data and the trigger data to the one first server. Also recited is that the one first server is further configured to receive the transmitted other data and trigger data, to transmit the other data and the trigger data to the one network station, responsive to which an icon is displayed at the one network station simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device responsive to the display of the icon. However, the Examiner does not discuss any of these limitations in the final Official Action.

Claim 43 additionally requires that the second database be further configured to store video programming schedule data, the central server be further configured to transmit the video programming schedule data stored in the second database, and the second server be further configured to store the transmitted video programming schedule data in the first database, and to transmit other data indicative of the availability of the first product related data and the stored video programming schedule data to the one first server. Also required is that the one first server be further configured to receive the transmitted other data and schedule data, to transmit the other data and the schedule data to the one network station, responsive to which an icon is displayed at the one network station simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device responsive to the display of the icon. Here again, the Examiner has failed to even mention these features in the final rejection of this claim.

Likewise, the multitude of limitations recited in claims 44-46 have not been address in the final Official Action. Hence, it can only be concluded that the specific

features and limitations in claims 42-46 have been completely ignored by the Examiner.

Claim 38 requires that the one first server include a high priority queue and a low priority queue and be further configured to queue the received first product related request in one of the high and the low priority queues. Also required is that the second server be further configured to receive the further transmitted first product related request within a first time period after receipt of that request, if queued in the high priority queue, to receive the further transmitted first product related request within a second time period after receipt of that request, if queued in the low priority queue, wherein the second time period being longer than the first time period.

Claims 39 and 40 recite further limitations relating to the high and low priority queues of claim 38, including the claim 40 limitation that the first product related request includes information indicative of response priority and the one first server be further configured to queue the first product related request received from the one network device in the one queue based on the indicated response priority.

While acknowledging that PowerTV does not disclose priority queues, the proposes to modify PowerTV based on the teachings of Condon to result in the claimed invention.

However, the Examiner fails to provide any guidance or explanation as to where in Condon, or the applied combination, the requirements of claim 38-40 are suggested. Rather, the Examiner rejects each of claims 38-40 with the omnibus statement "Condon teaches using priority based queues in a plurality of servers to increase efficiency in a database."

It is respectfully submitted that, contrary to the Examiner's asserted conclusion, there is nothing within Condon or the applied combination to suggest the features of claims 38-40. For example, Condon does not even disclose low and high priority queues, as required by each of claims 38-40. Rather, Condon teaches a single queue that includes prioritized items, one item in the queue having a higher priority than another item in the same queue (see, generally, column 4, lines 40-53).

Claim 37 requires a second plurality of the first servers, with each of these servers configured to communicate with a second plurality of network devices associated with a second network, to receive a second product related request from

one of the second plurality of network devices, to further transmit the received second product related request, to receive the second product related data in response to the further transmitted second product related request, and to transmit the received second product related data to that one network device in response to the received second product related request. Also required is a third server, having a third database storing the first and the second product related data, and which is configured to receive the further transmitted second product related request, to transmit the stored second product related data to the one of the plurality of second servers from which that request is received, and to still further transmit the received second product related request. Finally, the central server is recited to be further configured to receive the still further transmitted second product related request and store that received request in the second database, and the first and the second product related data stored in the third database are the first and second product related data transmitted by the central server.

In support of the asserted anticipation and obviousness rejections of claim 37, the Examiner offers only that the "second plurality of first servers and a third server are either directly or inherently disclosed since the network is connected to the Internet and Internet applications may contain many servers", and that "if not directly or inherently disclosed, it would have been obvious ... to modify PowerTV to include the duplicate servers," since "[s]uch a modification is a mere duplication of parts."

Hence one is only left to wonder where such servers might be disclosed in PowerTV, or why such servers would be inherent just because the PowerTV network is connected to the Internet and Internet applications may contain many servers. Furthermore, if there is no such direct or inherent disclosure, why would it necessarily be obvious to modify PowerTV to include the required servers? Additionally, contrary to the Examiner's assertion that claim 37 requires "a mere duplication of parts", claim 37 in fact requires additional new elements within the system architecture which are configured to perform functions different than those of the elements recited in parent claim 29, as well as additional limitations on the central server of parent claim 29.

Hence, the rejection is lacks the requisite support. It also appears that the rejection has been made without consideration of express limitations within the claim.

Claim 32 requires that the first product related request is receivable from and the first product related data is transmittable to the one network device only if the one network device is tuned to one of multiple broadcast channels.

The Examiner relies on PowerTV, page 3, and asserts that "the operator is allowed to choose the content of the programming" in support of the rejection.

However, it is unclear how an operator's choice of programming content could anticipate a requirement that the product related request be receivable from and product related data be transmittable to a network device only if the network device is tuned to one of multiple broadcast channels, and the Examiner, notwithstanding being requested to do so, fails to provide any rationale as to the basis for the asserted conclusion.

Claim 33, which depends from claim 32, requires that the first product related data transmitted to the one network device be viewable in conjunction with video programming broadcast over the one channel.

As best understood, the Examiner relies on the discussion of an operating system for a set-top box beneficially including support for both broadcast and two-way system service (page 12) in rejecting claim 33.

However, how this disclosure could anticipate the requirement that transmitted product related data be viewable in conjunction with a video programming broadcast is unclear. Here again, the Examiner, notwithstanding being requested to do so, fails to provide any rationale as to the basis for the asserted conclusion.

Claim 41 requires the first product related data stored in the first and the second databases correspond to a preference of a user associated with the one network device.

The Examiner argues that "the server stores the user's information accessible with a password." The Examiner provides no indication of even which PowerTV server is being referred to, which portion of the PowerTV reference is contended to disclose the required limitations, or where in the applied art a user preference is even mentioned.

The Examiner's position simply cannot be understood. How is the disclosed use of a password to generally secure stored information relevant to the storage of product

related data which corresponds to a user preference being stored in two different databases? Again, notwithstanding a request for clarification, the final Official Action fails to provide any explanation as to the basis for the rejection.

Independent claim 29 requires, *inter alia*, a first plurality of first servers, each configured to communicate with a first plurality of network devices associated with a first network, to receive a first product related request from one of the first plurality of network devices, to further transmit the received first product related request, to receive first product related data in response to the further transmitted first product related request, and to transmit the received first product related data to that one network device in response to the received first product related request.

The Examiner, as can best be understood, contends that PowerTV teaches such a first plurality of first servers, with each configured to communicate with a first plurality of network devices associated with a first network and to receive a first product related request from one of the first plurality of network devices. In particular, the Examiner references the figure found on page 18 of PowerTV and argues "the first servers receive a first product related request from one of the first one of the first plurality of network devices (the user orders products or gets info via email and the world wide web ("WWW"))."

The page 18 figure shows a set-top box in communication with a broadcast carousel server, an email server, and an HTTP proxy server. These three servers are described on page 18. The broadcast carousel server 'webcasts' Web content to the set-top box. The email server "provides standard email functionality." The HTTP proxy server operates in multiple modes. It "acts as a normal 'Intranet' Web Server providing a repository for primarily local content," "acts as a buffer between external Internet Web sites and the set-top" by providing "parental control, enabling ratings control on accessed content in addition to access control lists," and it provides remote browser capability.

Accordingly, the servers of PowerTV are not each configured to have the same functionality and hence are not each configured to receive a first product related request from one of the first plurality of network devices, as required by claim 29.

Hence, the Examiner's position is inconsistent with the teachings within the applied reference itself.

Thus, it can only be concluded that the Examiner has rejected claim 29 based upon an improper hindsight reconstruction of the invention in view of the present disclosure or on pure speculation, and without due consideration of express claim limitations.

Claim 29 also requires, *inter alia*, (i) a second server, having a first database storing the first product related data and second product related data, configured to receive the further transmitted first product related request, to transmit the stored first product related data to the one of the first plurality of first servers from which that request is received, and to still further transmit the received first product related request, and (ii) a central server, having a second database storing the first and the second product related data, configured to transmit the first and second product related data stored in the second database, and to receive the still further transmitted first product related request and store the received request in the second database.

The Examiner asserts that the second server is "a service provider webserver such as compuserve, AOL, earthlink, or mindsping or content server such as tucows.com" and that the central server is an "e-commerce web site."

However, these webservers are not even described in PowerTV. Hence, how this assertion supports the anticipation rejection over PowerTV is unclear. Furthermore, the Examiner does not provide any explanation of how such servers would interact with the servers disclosed in the applied PowerTV reference, let along the basis on which the Examiner concludes that they could function as the second and central servers recited in claim 29.

The Examiner, as can be best understood, contends that a webserver (serving as the recited second server) would include a first database storing first product related data, because information "to be transmitted, ... is stored at least temporarily."

However, one can only ask why information to be transmitted must be stored in a database. Rather, it would seem quite unusual to temporarily store data to be transmitted in a database. A database is a storage area configured to store a collection of data that can be used for more than one purpose (see, for example, Burrow's

Dictionary of Computer Terms, Third Edition, Covington and Downy, 1992, ISBN 0-8120-4824-5).

As can be best understood, the Examiner also seems to argue that one of the PowerTV servers receives a product related request from a set-top box, and that server then passes the request to a service provider webserver, which in turn transmits the request to an e-commerce web site which stores product related data such as "price, quantity, and garment size." Apparently, the Examiner further contends that this e-commerce site then transmits this information to the service provider webserver, which in turn transmits it to a PowerTV server, which then in turn transmits it to a set-top box, although none of this is not discussed in the publication.

Hence, here again, it would appear that the Examiner has either based the rejection of independent claim 29 on an improper hindsight reconstruction or mere speculation, but in any event without due consideration of express claim limitations. Claims 29-36 and 41-46 stand rejected as anticipated under 35 U.S.C. §102(b) by PowerTV Inc., White Paper entitled "Applications and Service Infrastructure" (hereinafter "PowerTV"). Claim 37, which depends from claim 29, stands rejected as anticipated under 37 U.S.C. §102(b), or obvious under 37 U.S.C. §103(a) over PowerTV. Claims 38-40, which depend from claim 29, stand rejected as obvious under 35 U.S.C. §103(a) over PowerTV in view of Condon (U.S. Patent 5,956,714).

Accordingly, it is respectfully submitted that the Examiner has failed to establish a *prima facie* basis for the rejection.

2. THERE IS NO MOTIVATION TO COMBINE THE ART AS PROPOSED BY THE EXAMINER

It is incumbent upon the Examiner to provide a basis in fact and/or cogent technical reasoning to support the conclusion that one having ordinary skill in the art would have been motivated to combine references to arrive at a claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). In so doing, the Examiner is required to make the factual determinations set forth in Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 148 USPQ 459 (1966), **and** to provide a reason why one having ordinary skill in the art would have been led to modify the prior art

reference to arrive at the claimed invention. Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). Such a reason must stem from some teaching, suggestion or inference in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.d 281, 227 USPQ 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984); In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983).

Claims 38-40, which depend from claim 29, stand rejected under 35 U.S.C. §103(a) as being obvious over PowerTV in view of Condon (U.S. Patent 5,956,714).

The Examiner acknowledges that PowerTV does not teach priority queues. The Examiner looks generally to Condon for such feature, though the Examiner has failed to provide any guidance as to where in Condon, or the applied combination, the requirements of claim 38-40 are disclosed. The Examiner rejects each of claims 38-40 with the omnibus statement "Condon teaches using priority based queues in a plurality of servers to increase efficiency in a database."

Although it is acknowledged that Condon teaches a technique for queuing, it is entirely unclear what would motivate one to attempt to combine Condon's teaching with those of PowerTV. More particularly, PowerTV lacks any suggestion of a need for a queue. Condon teaches a single queue that includes prioritized items, one item in the queue having a higher priority than another item in the same queue (see, generally, column 4, lines 40-53), but lacks any suggestion that such a queue could be beneficially implemented in a system such as that described in PowerTV.

Hence, there would appear to be nothing within the applied art references to motivate their combination, or to suggest modification of the PowerTV system to include the Condon queue. Further, the Examiner's only explanation of what might motivate such a combination is that "[s]uch a modification would have reduced the processing time for high priority queries in the database". However, one can only ask why and in what database.

Accordingly, it is respectfully submitted that there is no motivation for one of ordinary skill in the art to combine the applied art, as the Examiner proposes, in the rejection of claims 38-40.

3. THE APPLIED REFERENCE FAILS TO TEACH THE CLAIMED INVENTION

Anticipation, under 35 U.S.C. § 102, requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. Although anticipation requires that only that the claim under attack "read on" something disclosed in the reference, all limitations of the claim must be found in the reference, or "fully met" by it. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).

A rejection under 35 U.S.C. §102 requires the disclosure in a single reference of each element of a claimed invention. Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc., 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992). Moreover, in rejecting a claim under 35 U.S.C. §102, the Examiner is required to identify where in an applied reference each feature of a claimed invention is disclosed. In re Rijckaert, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

Claims 29-37 and 41-46 stand rejected under 35 U.S.C. §102(b) as anticipated by PowerTV Inc., White Paper entitled "Applications and Service Infrastructure" (hereinafter "PowerTV").

It is respectfully submitted that the applied art fails to teach the invention, as recited in claims 29, 32-33, 37, and 41-46 for reasons discussed above in connection with the lack of establishment of a prima facie basis for the anticipation rejection.

Additionally, it is respectfully submitted that the Examiner has failed to identify any teaching whatsoever of features of independent claim 29, as well as of the claim 29 dependencies rejected as anticipated over the applied prior art.

Such features, for example, include a second server, having a first database and a central server having a second database which both store the same data, i.e. the first product related data and second product related data. As another example, the Examiner has also failed to identify any teaching within the applied prior art of a central

server which also transmits the first and second product related data which is stored in the first database, and which receives product related request transmitted from the second server and store the received request in the second database.

As yet another example, claim 30 requires that each of the first plurality of servers be configured to transmit applications operable to receive the product related data. The Examiner contends that the disclosure of downloaded Java applications on page 23 of PowerTV teaches this feature.

However, while it is acknowledged that PowerTV does disclose transmitting applications to set-top boxes, the applied art lacks any disclosure of a first plurality of servers being configured to transmit applications, or that transmitted applications could be operable to receive product related data.

Claim 31 requires that the first product related request be either a request to purchase a product or a request for information regarding the product itself.

The Examiner rejects this claim, asserting "purchase a sweater or information via 'compuserve" in support. Not only is the basis for rejection not understood, the applied PowerTV reference does not disclose particulars regarding information which might be accessed, let along a system configured to transmit and/or receive a product related request.

Claim 36 requires that the first product related data be different than the second product related data.

The Examiner concludes that this is "inherent."

One can only asked inherent to what? PowerTV does not disclose either first product related data or second product related data, hence how these features could be inherent is unclear.

With further reference to claim 37, in addition to the points discussed above in addressing the lack of a *prima facie* basis for the rejection, it will be understood PowerTV does not teach either the required first plurality of first servers or the second server. Thus, even if the second plurality of first servers were a duplication of the first plurality of first servers (which it is respectfully submitted is not the case), and even if the third server was a duplication of the second serve (which it is respectfully submitted is not the case), claim 37 would nonetheless patentably distinguish over PowerTV.

Accordingly it is respectfully submitted that claims 29, 32-33, 37, and 41-46 are not anticipated by the applied prior art.

4. THE APPLIED REFERENCES FAILS TO SUGGEST THE CLAIMED INVENTION

In rejecting claims under 35 U.S.C. 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). It also is incumbent upon the Examiner to provide a basis in fact and/or cogent technical reasoning to support the conclusion that one having ordinary skill in the art would have been motivated to combine references to arrive at a claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). In so doing, the Examiner is required to make the factual determinations set forth in Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 148 USPQ 459 (1966), **and** to provide a reason why one having ordinary skill in the art would have been led to modify the prior art reference to arrive at the claimed invention. Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). Such a reason must stem from some teaching, suggestion or inference in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984); In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983). Inherency requires certainty, not speculation. In re Rijckaert, 9 F.3rd 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); In re Oelrich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981); In re Wilding, 535 F.2d 631, 190 USPQ 59 (CCPA 1976). Objective evidence must be relied upon to defeat the patentability of the claimed invention. Ex parte Natale, 11 USPQ2d 1222 (BPAI 1988).

In determining obviousness, the inquiry is not whether each element existed in the prior art, but whether the prior art made obvious the invention as a whole for which patentability is claimed. Hartness Int'l, Inc. v. Simplimatic Eng'g Co., 819 F.2d 1100, 2

USPQ2d 1826 (Fed. Cir. 1987). It is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. In re Wesslau, 353 F.2d 238, 147 USPQ 391 (CCPA 1951). Piecemeal reconstruction of prior art patents is improper, In re Kamm, 452 F.2d 1052, 172 USPQ 298 (CCPA 1972). The Examiner must give adequate consideration to the particular problems and solution addressed by the claimed invention. Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); In re Rothermel, 276 F.2d 393, 125 USPQ 328 (CCPA 1960).

The fact that the prior art could be modified so as to result in the combination defined by the claims does not make the modification obvious unless the prior art suggests the desirability of the modification. In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986). The test is what the combined teachings would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 208 USPQ 817 (CCPA 1981). Simplicity and hindsight are not proper criteria for resolving obviousness, In re Warner, supra. The proper approach to the issue of obviousness is whether the hypothetical person of ordinary skill in the art, familiar with the references, would have found it obvious to make a structure corresponding to what is claimed. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983). Hindsight obviousness after the invention has been made is not the test. In re Carroll, 601 F2d 1184, 202 USPQ 571 (CCPA 1979). The reference, viewed by itself and not in retrospect, must suggest doing what applicant has done. In re Shaffer, 229 F2d 476, 108 USPQ 326 (CCPA 1956); In re Skoll, 523 F2d 1392, 187 USPQ 481 (CCPA 1975).

Again, the issue is not whether it is within the skill of the artisan to make the proposed modification but, rather, whether a person of ordinary skill in the art, upon consideration of the references, would have found it obvious to do so. The fact that the prior art could be modified so as to result in the combination defined by the claims would not have made the modification obvious unless the prior art suggests the desirability of the modification. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986), In re Keller, supra. See In re Laskowski, F2d., 10 USPQ2d 1397 (CAFC 1989).

Claim 37, which depends from claim 29, stands rejected under 35 U.S.C. §103(a) as being obvious over PowerTV. Claims 38-40, which also depend from claim 29, stand rejected under 35 U.S.C. §103(a) as being obvious over PowerTV in view of Condon (U.S. Patent 5,956,714).

It is respectfully submitted that the applied art fails to make obvious the invention, as recited in claims 37-40 for reasons discussed above in connection with the lack of establishment of a prima facie basis for the rejection, as well as the non-anticipation of claim 37 over the applied PowerTV reference and lack of motivation to combine PowerTV and Condon as proposed.

Additionally, it is respectfully submitted that the Examiner has failed to identify any disclosure within the applied art that suggest the features of claims 37-40. For example, the low and high priority queues required by claims 38-40 distinguish over the applied art, since Condon discloses only a single queue that includes prioritized items, one item in the queue having a higher priority than another item in the same queue (see, generally, column 4, lines 40-53). Furthermore, Condon lacks any disclosure of the different time periods associated with different queues as required by claims 38-40. There is also no disclosure in Condon to suggest that a high priority queue be a real time queue and a low priority queue be a batch queue, as required by claim 39. Condon also does not disclosure, or in any way suggest, that a product related request include information indicative of a response priority and that a product related request be queued based upon the indicated response priority, as required by claim 40.

Accordingly it is respectfully submitted that claims 37-40 are non-obvious over the applied prior art.

4. THE REJECTION IS BASED ON EITHER AN IMPROPER HINDSIGHT RECONSTRUCTION OF THE INVENTION BASED ON THE APPLICATIONS OWN TEACHINGS OR ON PURE SPECULATION

Hindsight obviousness after the invention has been made is not the test. In re Carroll, 601 F2d 1184, 202 USPQ 571 (CCPA 1979). The reference, viewed by itself and not in retrospect, must suggest doing what applicant has done. In re Shaffer, 229 F2d 476, 108 USPQ 326 (CCPA 1956); In re Skoll, 523 F2d 1392, 187 USPQ 481 (CCPA

1975).

Inherency requires certainty, not speculation. In re Rijckaert, 9 F.3rd 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); In re Oelrich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981); In re Wilding, 535 F.2d 631, 190 USPQ 59 (CCPA 1976). Objective evidence must be relied upon to defeat the patentability of the claimed invention. Ex parte Natale, 11 USPQ2d 1222 (BPAI 1988).

As discussed in detail above, the appealed claims have been rejected without objective factual support or rational. The prior art cited in support of the rejections has been applied in a manner inconsistent with its own teachings. Combinations have been asserted for which no motivation exist. Express limitations set forth in the claims have been completely or effectively ignored. The evidence shows that there is nothing in the applied prior art to support the Examiner's position that the present claims are anticipated and/or obvious, Hence, at best, it can only be concluded that the rejection of the claims, as set out in the Final Official Action, reflects either an improper hindsight reconstruction of the invention based on the teachings of the subject application itself or pure speculation on the part of the Examiner.

## CONCLUSION

It is respectfully submitted that the Examiner (i) has failed to establish a prima facie case for the rejection, (ii) has proposed to combine art in a manner which is unmotivated, (iii) has failed to apply art which teaches or suggests the claimed invention, and (iv) has, at best, attempted to improperly reconstruct the invention using the inventors own disclosure or relied on pure speculation in rejecting the claims. Thus, the rejection of the pending claims as anticipated under 35 U.S.C. §102(b) and/or as obvious under 35 U.S.C. §103(a) over the applied prior art, whether taken individually or in any combination, is improper.

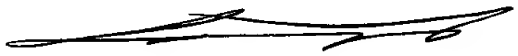
In summary, Applicants respectfully submit that the applied references do not teach or suggest features recited in the rejected independent claim, as well as those recited in numerous dependent claims. Furthermore, the proposed combinations of the

applied references are themselves unmotivated and therefore improper. Accordingly, it is submitted that the art does not provide any teaching, or suggestion within its teachings, which would lead to the features or advantages of the instant invention, and the claims patentably define over the art. Thus, the rejection of the pending claims is in error, and reversal is clearly in order and is courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 01-2135 and please credit any excess fees to such deposit account.

Respectfully Submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Alfred A. Stadnicki
Registration No. 30,226

Suite 1800
1300 North Seventeenth Street
Arlington, VA 22209
Telephone: (703) 236-6080
Facsimile: (702) 312-6666
E-mail: astadnicki@antonelli.com
Date: September 4, 2002

## APPENDIX OF PENDING CLAIMS UNDER APPEAL

29. An electronic commerce system architecture for use in networks having a plurality of network devices, each representing a respective network user, comprising:

a first plurality of first servers, each configured to communicate with a first plurality of network devices associated with a first network, to receive a first product related request from one of the first plurality of network devices, to further transmit the received first product related request, to receive first product related data in response to the further transmitted first product related request, and to transmit the received first product related data to that one network device in response to the received first product related request;

a second server, having a first database storing the first product related data and second product related data, configured to receive the further transmitted first product related request, to transmit the stored first product related data to the one of the first plurality of first servers from which that request is received, and to still further transmit the received first product related request; and

a central server, having a second database storing the first and the second product related data, configured to transmit the first and second product related data stored in the second database, and to receive the still further transmitted first product related request and store the received request in the second database;

wherein the first and the second product related data stored in the first database are the first and second product related data transmitted by the central server.

30. A system architecture according to claim 29, wherein each of the first plurality of first servers is further configured to transmit applications operable to receive the product related data.

31. A system architecture according to claim 29, wherein the first product related request is one of a request to purchase a product and a request for information regarding the product itself.

32. A system architecture according to claim 29,
wherein the first product related request is receivable from and the first product related data is transmittable to the one network device only if the one network device is tuned to one of multiple broadcast channels.

33. A system architecture according to claim 32, wherein the first product related data transmitted to the one network device is viewable in conjunction with video programming broadcast over the one channel.

34. A system architecture according to claim 29, wherein
the first plurality of network devices is a plurality of set top boxes.

35. A system architecture according to claim 29, wherein the first network is a video broadcast network.

36. A system architecture according to claim 29, wherein the first product related data is different than the second product related data.

37. A system architecture according to claim 29, further comprising:

a second plurality of the first servers, each configured to communicate with a second plurality of network devices associated with a second network, to receive a second product related request from one of the second plurality of network devices, to further transmit the received second product related request, to receive the second product related data in response to the further transmitted second product related request, and to transmit the received second product related data to that one network device in response to the received second product related request; and

a third server, having a third database storing the first and the second product related data, configured to receive the further transmitted second product related request, to transmit the stored second product related data to the one of the plurality of second servers from which that request is received, and to still further transmit the received second product related request;

wherein the central server is further configured to receive the still further transmitted second product related request and store that received request in the second database, and the first and the second product related data stored in the third database are the first and second product related data transmitted by the central server.

38. A system architecture according to claim 29, wherein:

the one first server includes a high priority queue and a low priority queue and is further configured to queue the received first product related request in one of the high and the low priority queues; and

the second server is further configured to receive the further transmitted first product related request within a first time period after receipt of that request, if queued in the high priority queue, to receive the further transmitted first product related request within a second time period after receipt of that request, if queued in the low priority queue, wherein the second time period being longer than the first time period.

39. A system architecture according to claim 38, wherein:

the high priority queue is a real time queue; and

the low priority queue is a batch queue.

40. A system architecture according to claim 38, wherein:

the first product related request includes information indicative of response priority; and

the one first server is further configured to queue the first product related request received from the one network device in the one queue based on the indicated response priority.

41. A system architecture according to claim 29, wherein the first product related data stored in the first and the second databases correspond to a preference of a user associated with the one network device.

42. A system architecture according to claim 29, wherein:

the second database is further configured to store video programming schedule data;

the central server is further configured to transmit the video programming schedule data stored in the second database;

the second server is further configured to store the transmitted video programming schedule data in the first database, to generate trigger data based on the video programming schedule data stored in the first database, and to transmit other data indicative of the availability of the first product related data and the trigger data to the one first server;

the one first server is further configured to receive the transmitted other data and trigger data, to transmit the other data and the trigger data to the one network station, responsive to which an icon is displayed at the one network station simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device responsive to the display of the icon.

43. A system architecture according to claim 29, wherein:

the second database is further configured to store video programming schedule data;

the central server is further configured to transmit the video programming schedule data stored in the second database;

the second server is further configured to store the transmitted video programming schedule data in the first database, and to transmit other data indicative of the availability of the first product related data and the stored video programming schedule data to the one first server;

the one first server is further configured to receive the transmitted other data and schedule data, to transmit the other data and the schedule data to the one network station, responsive to which an icon is displayed at the one network station simultaneous with a display of broadcast video programming, and to receive the first product related request from the one network device responsive to the display of the icon.

44. A system architecture according to claim 29, wherein:

the one first server is further configured to receive user related data corresponding to a user of the one network devices, and to further transmit the received user related data to the second server;

the second server is further configured to store the further transmitted user related data in the first database, and to transmit the stored user related data with the first product related request to the central server; and

the central server is further configured to store the user related data transmitted by the second server in the second database in association with the stored first product related request.

45. A system architecture according to claim 44, wherein the user related information received by the one first server includes a unique identifier of the one network resource.

46. A system architecture according to claim 44, wherein the user related information received by the one first server is received from at least one of the corresponding user and a broadcaster of video programming over the first network.

47. A system architecture according to claim 44, wherein the central server is further configured to aggregate the user related data transmitted by the second server, to generate a user profile based on the aggregated user related data, and to select the first product related information based on the generated user profile.